3644 Th

DOCKET NO.: 4778

IN THE HALLED STATES PATENT AND TRADEMARK OFFICE

IN THE MATTER OF THE APPLICATION FOR PATENT

OF: Fabio P. BERTOLOTTI | ART UNIT: 364

SERIAL NO.: 10/511,930 | CONF. NO.: 2527

FILED: October 18, 2004

FOR: PERFORATED SKIN STRUCTURE FOR LAMINAR-FLOW SYSTEMS

COMMISSIONER FOR PATENTS P.O. BOX 1450

ALEXANDRIA, VA 22313-1450 July 1, 2005

INFORMATION DISCLOSURE STATEMENT WITH CERTIFICATE OF MAILING

Dear Sir:

- Pursuant to 37 C.F.R. §§ 1.56, 1.97 and 1.98 applicant encloses a Form PTO-1449, copies of references AN to AT cited thereon, and a copy of the International Search Report issued in the corresponding PCT International Application PCT/US03/12008 on November 25, 2003. Copies of references AA to AM are not (and need not be) enclosed, because they have been transmitted to the USPTO by the International Searching Authority in the International processing of this PCT application.
- This Information Disclosure Statement is being filed before the mailing of a first Office Action on the merits according to the available status information. Thus, in accordance with 37 C.F.R. 1.97(b)(3), no fee is due.
- References AA to AT are in English. References AE, AG, AH, AI, AK and AM have been discussed at page 2 of the present specification. References AN, AO, AP and AQ have been discussed at pages 3 and 4 of the present specification. Therefore no further discussion of the references is necessary.

4778/WFF:ks

- Moreover, the enclosed Search Report indicates the degree of relevance of each of the references AA to AD and AJ to AL by category ("Y" means relevant to obviousness when combined with another reference; and "A" means technological background). Thereby a concise explanation of the relevance has been provided (see MPEP §609).
- 5) The Examiner is requested to consider all references of record, return an initialed copy of the enclosed Form PTO-1449 and ensure that all references of record are printed on any patent issuing from this application.
- 6) Favorable consideration and allowance of claims 1 to 31 are respectfully requested.

Respectfully submitted, <u>Airbus Deutschland GmbH</u> Assignee

WFF:ks/4778
Enclosures:
postcard,
Form PTO-1449,
7 references,
copy of Int. Search Report

Walter F. Fasse Patent Attorney Reg. No.: 36132

Tel. No.: 207-862-4671 Fax. No.: 207-862-4681

P.O. Box 726

Hampden, ME 04444-0726

CERTIFICATE OF MAILING:

I hereby certify that this correspondence with all indicated enclosures is being deposited with the U. S. Postal Service with sufficient postage as first-class mail, in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date indicated below.

Name: M. Hellwig-Hill - Date: July 1, 2005

Sheet 1 of 3 FIRST IDS LIST OF REFERENCES CITED BY APPLICANT

(FORM PTO-1449)
DATED: July 1, 2005/

Atty. Docket No. 4778/PCT

Serial No.: 10/511,930

Applicant: Fabio P. BERTOLOTTI

U.S. Filing Date: October 18, 2004 Art Unit: 3644

PATENT DOCUMENTS

JUL 0 5 2005

| *EXAMINER INITIAL | | DOCUMENT NO. | DATE | NAME | cı. | Sub- Cl. | Fil. Date |
|----------------------|----|--------------|---------|-------------------|-----|-------------|--------------|
| | AA | 2,833,492 | 05/1958 | Fowler | - | - | - |
| ···· | AB | 3,203,648 | 08/1965 | Vanesian | - | - | - |
| | AC | 3,521,837 | 07/1970 | Papst | | - | - |
| | AD | 3,951,360 | 04/1976 | Anxionnaz | | _ | - |
| | AE | 5,263,667 | 11/1993 | Horstman | | | |
| | AF | 5,316,032 | 05/1994 | DeCoux | | _ | - |
| | AG | 5,884,873 | 03/1999 | Breit | - | - | - |
| | АН | 5,899,416 | 05/1999 | Meister et al. | _ | - | 1- |
| | AI | 6,050,523 | 04/2000 | Kraenzien | - | - | - |
| | AJ | 6,119,987 | 09/2000 | Kiknadze et al. | - | - |] _ |
| | AK | 6,216,982 | 04/2001 | Pfennig et al. | | _ | - |
| | AL | 6,332,593 | 12/2001 | Kamiadakis et al. | - | _ | - |
| | АМ | 6,415,510 | 07/2002 | Mertens et al. | | _ | |

FOREIGN PATENT DOCUMENTS

| | DOCUMENT NO. | | | | | | DATE | COUNTRY | cı. | Sub- | Trans. | |
|------|--------------|--|--|--|--|--|---------|---------|-----|------|--------|----|
| | | | | | | | | | | | Yes | No |
| | | | | | | | <u></u> | | | | | |

OTHER DOCUMENTS

EXAMINER

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

| ll . | RST I | eet 2 IDS 1 | LIS | TC |) OF | | FERE | Atty. Docket No. Serial No.: 10/511,930 | | | | | | | | |
|----------------------|-------|--|--|------|---------|--|------|---|----------------------------------|-----|-------------|-----------------|-----------------------------|--|--|--|
| | DRM I | BY AI PTO-: Iv 1 | 144 | 9) | | | | | Applicant: Fabio P. BERTOLOTTI | | | | | | | |
| | | | | | | | | | U.S. Filing Da October 18, 20 | | | Art Un: 3644 | Art Unit: | | | |
| | | | | | | | υ. | S. PATEN | DOCUMENTS | | | | | | | |
| *EXAMINER INITIAL | | DOCUMENT NO. | | | | | | DATE | NAME | cı. | Sub- Cl. | Fil. Date | | | | |
| | I | <u> </u> | | | | | FORE | GIGN PATE | T DOCUMENTS | | | | <u> </u> | | | |
| | | DOC | JMEN | IT N | 10. | | | DATE | COUNTRY | c1. | Sub- Cl. | Tra | ans. | | | |
| | | | | | | | ΓΓ | | | | | Yes | No | | | |
| | AN | H. Bippes, "Basic Experiments on Transition in Three-Dimensi Boundary-Layers Dominated by Crossflow Instability", Progress in Aeros Sciences 35, pgs. 363-412, 1999. D. Arnal et al., "Influence of Surface Roughness and of Suction on Receptivity of a Swept-Wing Boundary Layer", in Laminar-Turbulent Transi proceedings, IUTAM Symposium, Sedona AZ, Sept. 13-17, 1999, pgs. 589-published by Springer Verlag, H. Hasel (Ed.), 2000. P. Wassermann et al., "DNS-Investigations of the Development and Control Cross Flow Vortices in a 3-D Boundary-Layer Flow", in Laminar-Turbu Transition proceedings, IUTAM Symposium, Sedona AZ, Sep. 13-17, 1999; 565 to 570, published by Springer Verlag, H. Hasel (Ed.), 2000. | | | | | | | | | | | on the | | | |
| | AP | | | | | | | | | | | | bulent | | | |
| | AQ | Loca | F. P. Bertolotti, "Receptivity of Three-Dimensional Boundary-Layers to Localized Wall Roughness and Suction", Phys. Fluids, Vol. 12, Number 7, pg. 1799-1809, July 2000. | | | | | | | | | | | | | |
| | AR | F. P. Bertolotti, "The Equivalent Forcing Model for Receptivity Analyswith Application to the Construction of a High-Performance Skin Perforation Pattern for LFC"; from S. Wagner et al. (Editors), "Recent Results Laminar-Turbulent Transition" Springer Verlag Publishers, Heidelber Germany, Notes on Numerical Fluid Mechanics and Multidisciplinary Designation 186, 2003. | | | | | | | | | | | ration lts in elberg. | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | - | | · | | | | |
| EXAMINER | | | | | | | | DATE CO | NSIDERED | | | | | | | |

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next

communication to applicant.

| CI | RST | neet IDS BY A PTO- | LISI PPLI | OF CAN | | EFERI | ENCES | Atty. Docket No. Serial No.: 4778/PCT 10/511,930 Applicant: Fabio P. BERTOLOTTI | | | | | |
|--|--------------|---|--------------|-----------|--------------|------------------|------------|--|---------------------|-------------------|-----------------------|--------|--|
| DATED | | | | | | | | U.S. Filing Date: October 18, 2004 | | Art Unit: 3644 | | | |
| | | | | | | υ. | S. PATEN | T DOCUMENTS | | | • | | |
| *EXAMINER INITIAL | DOCUMENT NO. | | | | | | | NAME | NAME C1 | | | | |
| | | | | | | | <u>_</u> | <u> </u> | | | | | |
| | т | 1 | | | | FORE | EIGN PATE | NT DOCUMENTS | | | | | |
| | | DOCU | MENT | NO. | | | DATE | COUNTRY | c1. | Sub- | Trans. | | |
| | <u> </u> | | | | | | | | | | Yes | No | |
| | | | |] | | | | | | | | | |
| | | | | | | | OTHER DO | CUMENTS | | • | | | |
| | AS | R. Messing et al., "Effects of Suction Through Arrays of Holes on a Boundary Layer Investigated by Spatial Direct Numerical Simulation Institut fuer Aerodynamik und Gasdynamik, University Stuttgart, Stuttgargermany; in Laminar-Turbulent Transition proceedings, IUTAM Symposi Sedona AZ, September 13-17, 1999; pgs. 235-240, published by Sprin Verlag, H. Hasel (Ed.), 2000. | | | | | | | | | | | |
| | AT | C. Abegg et al., "Stabilization of Boundary-Layer Flows Subject to Crossflo Instability with the Aid of Suction", DLR, Institute of Fluid Mechanics Goettingen, Germany, in Laminar-Turbulent Transition proceedings, IUTA Symposium, Sedona AZ, September 13-17, 1999; pgs. 607 to 612, published by Springer Verlag, H. Hasel (Ed.) 2000. | | | | | | | | | | | |
| EXAMINER | | | | | | | DATE CO | NSIDERED | | | | | |
| *EXAMINER: line throug communicati | iu cirs | ation i | r not | in co | onsi onfo | dered, rmance | whether or | not citation is in considered. Include copy | nformanc of this | e with | MPEP 609 with next | ; Draw | |